UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND – REGION 1
5 Post Office Square, Suite 100
Mail Code OSRR07-4
Boston, MA 02109-3912

August 4, 2016

James Cashwell
Olin Corporation
3855 North Ocoee Street
Suite 200
Cleveland, TN 37312

Subject: EPA Review and Conditional Approval of GW-413 Area Supplemental Investigation Proposal - Olin Chemical Superfund Site, Wilmington, Massachusetts

Dear Mr. Cashwell:

In accordance with Paragraph 40 of the Administrative Settlement Agreement and Order on Consent ("AOC"), Region I of the United States Environmental Protection Agency ("EPA") has completed a review of the above referenced letter proposal prepared by AMEC on June 14, 2016 (the "Proposal").

Pursuant to Section 1.III.D of the Remedial Investigation/Feasibility Study Statement of Work ("RI/FS SOW"), EPA solicited comments from external stakeholders. EPA has consolidated certain written comments received within the context of this letter. Original comment letters received by EPA are enclosed.

The GW-413 cluster was installed by Olin at the request of EPA to verify that the northern extent of contamination for OU3 had been fully delineated. The detection of elevated concentrations of NDMA in the deep overburden and, to a lesser extent, in shallow bedrock groundwater was not anciticpated by EPA based on the existing CSM for the Site. While EPA appreciates Olin's recognition of the need to delineate the full nature and extent of groundwater contamination in the northern area by proposing three well pairs, EPA is concerned that the lack of detailed information regarding hydrology and bedrock lithology in this part of the study area will make it difficult to determine if the proposed well clusters are sufficient, which is necessary to gain finality in closing this important data gap. Therefore, as reflected in the comments below, EPA is requesting addition efforts beyond the scope of the current proposal with an overall goal of completing the OU3 field study without multiple additional iterations.

Condition

EPA concurs with the three proposed well pair locations, assuming the comments below are adequately addressed. The shallow bedrock wells should be installed installed and screening in a major water bearing fracture zone, and geophyscially logged following installation. The new wells should be surveyed and tied into the existing monitoring well network to further evaluate groundwater flow directions and map local bedrock contours.

Comments

1. There is no explanation provided for the elevated detections of NDMA at GW-413. AMEC discusses results relative to nearby wells GW-31D and GW-32D, but the concentrations of NDMA detected in these wells are lower and do not lend to an understanding of the CSM in this part of the study area. GW-31D and 32D were last sampled in 2010, so EPA may presume that the concentrations in these 2 well clusters may be higher now. However, another plausible explanation may be that the groundwater in GW-413 flows from the area of GW-57D, which had concentrations of NDMA (in 2011 and 2012) which were slightly elevated above the detections at GW-413. Please provide an updated CSM for this portion of the study area which provides a conceptual rationale for the detections of NDMA at GW-413.

2. In addition to the three proposed well clusters, EPA requests that the GW-413D and 413BR wells be re-sampled at the same, as wells as existing wells GW-31D, GW-32D and GW-57D to eliminate temporal differences in the data set.

3. It is apparent that several existing monitoring wells are present on the Neo-Resins and Allcoat properties. EPA requests that Olin seek access from these property owners to sample any of their monitoring wells which are screened in the deep overburden or shallow bedrock zones, and conduct geophysically logging on any bedrock wells sampled.

4. EPA requests that in addition to the proposed analytes (NDMA and inorganics), specific conductivity and pH measurements be collected from the proposed and existing wells to be sampled. EPA assumes that the list of inorganics to be sampled will include the DAPL/diffuse groundwater constituents; ammonia, chloride, magnesium, sodium and sulfate.

5. A synoptic water level round should be conducted in the northern portion of the Olin facility, and should include available monitoring wells to the north and northwest as well as GW-413 and the three new wells pairs to be installed. This water level round should include, at a minimum, shallow overburden wells GW-31S, GW-32S, GW-47, GW-413S, GW-61S/GW-67S, and GW-73S; deep overburden wells GW-31D, GW-32D, GW-413D, GW-57D, GW-61D, and GW-73D/GW-404D; and bedrock wells GW-406BRS, GW-413BR, GW-61BR, GW- 65BRS, and GW-404BR. The synoptic groundwater levels would provide groundwater flow control.

Please call me if you have any questions. Please provide EPA with a minimum of five (5) days notice prior to performing any OU3 field work.

Sincerely,

James M. DiLorenzo
Remedial Project Manager
USEPA Region 1 - New England

Attachments: Nobis Comment Letter
GeoInsight Comment Letter
WERC Comment Letter
MADEP Comment Letter

Cc: Heather Ford, Nobis
Joe Coyne, MassDEP
Jeff Hull, Town of Wilmington
Michael Webster, GeoInsight
Martha Stevenson, WERC